

### ABSTRACT OF THE DISCLOSURE

An optical system (in Figs. 1A and 1B) wherein a rectilinear laser beam of homogeneous energy distribution is defined for annealing a non-single crystalline semiconductor film (a surface to-be-irradiated 1108), is constructed of reflectors (1106, 5 1107 etc.) easily and inexpensively without including lenses of transmission type. The rectilinear laser beam can be defined having a length of at least 600 (mm) which corresponds to the shorter latus of a large-sized substrate for mass production.